

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Ad
Cont

Claim 1 (Currently amended): A white balance correcting device for correcting white balance of a picked-up image, comprising:

mean value calculating part which calculates means for dividing an image picking up plane into a plurality of blocks and calculating a mean value of brightness and mean values of color signals from video signals obtained in each of the a plurality of blocks of an image pickup up plane;

peak value acquiring part which acquires means for acquiring a peak value of brightness and peak values of color signals from video signals obtained in each of the plurality of blocks;

comparison part which makes comparison between brightness information of the mean value and the peak value;

selection part which selects either of the mean values of the color signals means for selecting one of the value obtained by said mean value calculating part means and the value or the peak values of color signals obtained by said peak value acquiring means part according to comparison result by said comparison part; and
white balance control part which controls means for controlling white balance on the basis of the values value selected by said selection means part.

Claim 2 (Currently amended): A white balance correcting device according to claim 1, wherein said ~~selection means~~ comparison part computes a ratio comparison between

Al
Cont

a first integral value obtained by integrating mean values of video signals obtained in the plurality of blocks by said mean value calculating part means and a second integral value obtained by integrating peak values of video signals obtained in the plurality of blocks by said peak value acquiring means part, and, if the second integral value is not less than a predetermined number of times the first integral value, said selection part selects the value obtained by said peak value acquiring means part, and, if the second integral value is less than the predetermined number of times the first integral value, said selection part selects the value obtained by said mean value calculating means part.

Claim 3 (Currently amended): A white balance correcting device according to claim 2, further comprising:

white determining part which determines means for determining whether values calculated by said mean value calculating means part and values acquired by said peak value acquiring means part exist within a white range,

wherein said ~~selection means~~ comparison part integrates only values which have been determined by said white determining means part to exist within the white range, to obtain the first integral value and the second integral value.

Claim 4 (Currently amended): A white balance correcting device according to claim 1, wherein said peak value acquiring means part acquires peak values of video signals from signals that have beforehand been subjected to limitation for setting an upper limit to a signal level of an inputted video signal.

Claim 5 (Currently amended): A white balance correcting device according to claim 1, wherein said peak value acquiring means part acquires peak values of video signals

from signals that have beforehand been subjected by a low-pass filter to limitation for setting an upper limit to a signal level of an inputted video signal.

Am
Cont

Claim 6 (Currently amended): A white balance correcting device for correcting white balance of a picked-up image, comprising:

mean value calculating ~~means for calculating~~ part which calculates a mean value of inputted video signals;

peak value acquiring ~~means for acquiring~~ part which acquires a peak value of the inputted video signals;

comparison part which makes comparison between brightness information of the mean value and the peak value;

selection means for selecting one of the value part which selects either of mean color values obtained by said mean value calculating means and the value part or peak color values obtained by said peak value acquiring means part according to the comparison result by said comparison part; and

white balance control ~~means for controlling~~ part which controls white balance on the basis of the ~~value~~ values selected by said selection means part.

Claim 7 (Currently amended): A white balance correcting device according to claim 6, wherein said ~~selection means~~ comparison part computes a ~~ratio~~ comparison between a mean value of video signals obtained by said mean value calculating means part and a peak value of video signals obtained by said peak value acquiring means part, and, if the peak value is not less than a predetermined number of times the mean value, said selection part selects the peak value, and, if the peak value is less than the predetermined number of times the mean value, said selection part selects the mean value.

Claim 8 (Currently amended): A white balance correcting method for correcting white balance of a picked-up image, comprising:

~~a mean value calculating step of dividing an image picking-up plane into a plurality of blocks; and~~

calculating a mean value of brightness and mean values of color signals from video signals obtained in each of the plurality of blocks;

acquiring a peak value ~~acquiring step of brightness and peak values of color signals from~~ acquiring a peak value of video signals obtained in each of the plurality of blocks;

making comparison between brightness information of the mean value and the peak value;

~~a selection step of selecting either one of the mean values of color signals value obtained by said mean value calculating or the peak values of color signals step and the value obtained by said peak value acquiring step~~ according to comparison result; and

controlling a white balance ~~control step of controlling white balance on the a~~ basis of the value values selected by said selection step.

Claim 9 (Currently amended): A white balance correcting method according to claim 8, ~~further comprising:~~

wherein, in making comparison, ~~a computing step of computing a ratio~~ between a first integral value obtained by integrating mean values of video signals obtained in the plurality of blocks by said mean value calculating step and a second integral value obtained by integrating peak values of video signals obtained in the plurality of blocks by said peak value acquiring step,

a!
Cont

wherein, if the second integral value is not less than a predetermined number of times the first integral value, the value obtained by said peak value acquiring step is selected by said selection step, and, if the second integral value is less than the predetermined number of times the first integral value, the value obtained by said mean value calculating step is selected by said selection step.

Claim 10 (Currently amended): A white balance correcting method according to claim 9, further comprising:

~~a white determining step~~ of determining whether values calculated by said mean value calculating step and values acquired by said peak value acquiring step exist within a white range,

wherein only values which have been determined by said white determining step to exist within the white range are integrated by said selection step to obtain the first integral value and the second integral value.

Claim 11 (Currently amended): A white balance correcting method according to claim 8, wherein peak values of video signals are acquired by said peak value acquiring step from signals that have beforehand been subjected to limitation for setting an upper limit to a signal level of an inputted video signal.

Claim 12 (Currently amended): A white balance correcting method according to claim 8, wherein peak values of video signals are acquired by said peak value acquiring step from signals that have beforehand been subjected by a low-pass filter to limitation for setting an upper limit to a signal level of an inputted video signal.

Claim 13 (Currently amended): A white balance correcting method for correcting white balance of a picked-up image, comprising:

Al
Cent

~~a mean value calculating step of calculating a mean value~~ values of inputted video signals;

~~a peak value acquiring step of acquiring a peak value~~ values of the inputted video signals;

making comparison between information of the mean value and the peak value;

~~a selection step of selecting either one of the value~~ values obtained by said mean value calculating ~~step and the value~~ or the values obtained by said peak value acquiring ~~step according to comparison result;~~ and

~~a white balance control step of controlling white balance on the basis of the value~~ values selected by said selection step.

Claim 14 (Currently amended): A white balance correcting method according to claim 13, ~~further comprising:~~

~~a computing step of computing a ratio between a mean value of video signals obtained by said mean value calculating step and a peak value of video signals obtained by said peak value acquiring step;~~

wherein, if the peak value is not less than a predetermined number of times the mean value in making comparison, the peak value is selected by said selection step, and, if the peak value is less than the predetermined number of times the mean value in making comparison, the mean value is selected by said selection step.

Claim 15 (Currently amended): A storage medium which stores therein a program for executing a process for correcting white balance of a picked-up image, said process comprising:

a1
Cont

dividing an image picking-up plane into a plurality of blocks;
calculating a mean ~~value~~ values of video signals obtained in each of the plurality of blocks;
acquiring a peak ~~value~~ values of video signals obtained in each of the plurality of blocks;
making comparison between information of the mean value and the peak value;
selecting either one of the calculated mean value and the acquired peak value values or the peak values according to comparison result; and
controlling white balance on the basis of the selected values of the mean values and the peak values one of the calculated mean value and the acquired peak value.

Claim 16 (Currently amended): A storage medium according to claim 15, ~~wherein said process further comprises computing a ratio between a first integral value obtained by integrating mean values of video signals obtained in the plurality of blocks and a second integral value obtained by integrating peak values of video signals obtained in the plurality of blocks, and~~

wherein, if the second integral value is not less than a predetermined number of times the first integral in making comparison, the acquired peak value is selected, and, if the second integral value is less than the predetermined number of times the first integral value in making comparison, the calculated mean value is selected.

Claim 17 (Currently amended): A storage medium according to claim 16, wherein said process further comprises:

determining whether calculated mean values and acquired peak values exist within a white range;

wherein only values which have been determined to exist within a the white range are integrated to obtain the first integral value and the second integral value.

Claim 18 (Original): A storage medium according to claim 15, wherein peak values of video signals are acquired from signals that have beforehand been subjected to limitation for setting an upper limit to a signal level of an inputted video signal.

Claim 19 (Currently amended): A storage medium according to claim 15, wherein peak values of video signals are acquired ~~from signals~~ that have beforehand been subjected by a low-pass filter to limitation for setting an upper limit to ~~a signal~~ level of an inputted video signal.

Claim 20 (Currently amended): A storage medium which stores therein a program for executing a process for correcting white balance of a picked-up image, said process comprising:

calculating a mean value values of inputted video signals;

acquiring a peak value values of the inputted video signals;

making comparison between brightness information of the mean value and the peak value;

selecting either of the mean values and the peak values according to comparison result ~~one of the calculated mean value and the acquired peak value;~~ and

controlling white balance on the basis of the selected ~~one of the calculated mean value and the acquired peak value~~ values by said selecting.

AI
Claim

Claim 21 (Currently amended): A storage medium according to claim 20,
~~wherein said process further comprises computing a ratio between a mean value of video~~
~~signals and a peak value of video signals, and~~

wherein, if the peak value is not less than a predetermined number of times the
mean value in making comparison, the acquired peak value is selected, and, if the peak value
is less than the predetermined number of times the mean value in making comparison, the
calculated mean value is selected.

Claim 22 (New): A white balance correcting device for correcting white balance
of a picked-up image, comprising:

mean value calculating part which calculates mean values of video signals
obtained in each of a plurality of blocks of an image pickup plane;

peak value acquiring part which acquires peak values of video signals from all
of the plurality of blocks;

selection part which selects either of the values obtained by said mean value
calculating part or the values by said peak value acquiring part; and

white balance control part which controls white balance on the basis of the
value selected by said selection part.